#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021915 Address: 333 Burma Road **Date Inspected:** 26-Feb-2011

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Oiu Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:** 

> **Component: OBG** Components

**Bridge No:** 34-0006

#### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

**NDT** 

**BAY 14** 

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 08396.

Ultrasonic Testing (UT).

This QA inspector performed UT of approximately 10 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3013R-027, 028, 024.

SEG3013AH- 042.

### WELDING

This QA Inspector observed the following work in progress:

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

#### **BAY 14**

This QA Inspector observed ZPMC qualified welding personnel identified as 067829 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate of OBG Segment 14W. Weld joint is identified as EP3020-001-107. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 204730 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel of OBG Segment 14W. Weld joint is identified as DP3126-001-139, 140. ABF Quality Assurance (QA) Inspector identified as Shen Jian was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-B-T-2132-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 204730 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel of OBG Segment 14W. Weld joint is identified as DP3125-001-022, 025. ABF Quality Assurance (QA) Inspector identified as Shen Jian was present to monitor the welding process. The welding variables recorded by ABF QA appeared to be in general compliance with WPS-B-T-2233-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066695 perform welding by Flux Cored Arc Welding (FCAW), on Anchor plate to Vertical shear plate weld of OBG Segment 14W. Weld joint is identified as SEG3020BB-111. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066239 perform welding by Flux Cored Arc Welding (FCAW), on longitudinal diaphragm stiffener weld of OBG Segment 14W. Weld joint is identified as SEG3020AA-019, 020. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2133-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 045175 perform welding by Flux Cored Arc Welding (FCAW), on longitudinal diaphragm stiffener weld of OBG Segment 14W. Weld joint is identified as SEG3020Y- 027, 028. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2133-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 066398 perform repair welding by Shielded Metal Arc Welding (SMAW), on longitudinal diaphragm to floor beam weld of OBG Segment 14W. Weld joint is identified as SEG3020E-053. ZPMC Quality Control (QC) Inspector identified as Sun Tian Liang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-3G (3F)-FCM-Repair and Critical welding repair report B-CWR 2735 Rev-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

# **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye, Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer